

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/516,803
Source: PT
Date Processed by STIC: 3/29/06

ENTERED



PCT

RAW SEQUENCE LISTING

DATE: 03/29/2006

PATENT APPLICATION: US/10/516,803

TIME: 09:35:25

Input Set : A:\-138.APP

Output Set: N:\CRF4\03292006\J516803.raw

3 <110> APPLICANT: Allan, Bernard
 4 Lavan, Brian
 5 Moodie, Shonna
 6 Waters, Steve
 7 Wong, Chi-Wai
 8 Metabolex, Inc.
 10 <120> TITLE OF INVENTION: Methods of Diagnosing & Treating Diabetes and
 Insulin
 11 Resistance
 13 <130> FILE REFERENCE: 016325-013800US
 15 <140> CURRENT APPLICATION NUMBER: US 10/516,803
 16 <141> CURRENT FILING DATE: 2004-12-02
 18 <150> PRIOR APPLICATION NUMBER: US 60/385,996
 19 <151> PRIOR FILING DATE: 2002-06-04
 21 <150> PRIOR APPLICATION NUMBER: US 60/386,113
 22 <151> PRIOR FILING DATE: 2002-06-04
 24 <150> PRIOR APPLICATION NUMBER: US 60/386,812
 25 <151> PRIOR FILING DATE: 2002-06-06
 27 <150> PRIOR APPLICATION NUMBER: US 60/386,935
 28 <151> PRIOR FILING DATE: 2002-06-06
 30 <150> PRIOR APPLICATION NUMBER: US 60/386,956
 31 <151> PRIOR FILING DATE: 2002-06-06
 33 <150> PRIOR APPLICATION NUMBER: US 60/386,958
 34 <151> PRIOR FILING DATE: 2002-06-06
 36 <150> PRIOR APPLICATION NUMBER: US 60/387,038
 37 <151> PRIOR FILING DATE: 2002-06-06
 39 <150> PRIOR APPLICATION NUMBER: WO PCT/US03/17941
 40 <151> PRIOR FILING DATE: 2003-06-04
 42 <160> NUMBER OF SEQ ID NOS: 36
 44 <170> SOFTWARE: PatentIn Ver. 2.1
 46 <210> SEQ ID NO: 1
 47 <211> LENGTH: 1426
 48 <212> TYPE: DNA
 49 <213> ORGANISM: Homo sapiens
 51 <220> FEATURE:
 52 <223> OTHER INFORMATION: human purinergic receptor P2Y, G-protein coupled 1
 53 (P2RY1) cDNA
 55 <220> FEATURE:
 56 <221> NAME/KEY: CDS
 57 <222> LOCATION: (47)..(1168)
 58 <223> OTHER INFORMATION: P2RY1
 60 <400> SEQUENCE: 1
 61 ccgcctccta cccctcggag ccgccgccta agtcgaggag gagagaatga ccgaggtgct 60
 62 gtggccggct gtccccaacg ggacggagcgc tgccttctg gccgggtccgg gttcgtcctg 120

P.6

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/516,803

DATE: 03/29/2006

TIME: 09:35:25

Input Set : A:\-138.APP

Output Set: N:\CRF4\03292006\J516803.raw

```

63 ggggaacagc acgggtgcct ccactgccgc cgtctcctcg tcgttcaaatt gcgccttgac 180
64 caagacgggc ttccagtttt actacctgcc ggctgtctac atcttggtat tcatcatcgg 240
65 cttcctgggc aacagcgtgg ccactctggat gtctgtcttc cacatgaagc cctggagcgg 300
66 catctccgtg tacatgttca atttggctct ggccgacttc ttgtacgtgc tgactctgcc 360
67 agccctgata ttctactact tcaataaaac agactggatc ttcggggatg ccatgtgtaa 420
68 actgcagagg ttcatctttc atgtgaacct ctatggcagc atcttgtttc tgacatgcat 480
69 cagtgcacac cggtagacgc gtgtggtgta cccctcaag tccctgggccc ggctcaaaaa 540
70 gaagaatgcg atctgtatca gcgtgctggt gtggctcatt gtgggtggtg cgatctcccc 600
71 catcctcttc tactcaggta cgggggtccg caaaaacaaa accatcacct gttacgacac 660
72 cacctcagac gagtacctgc gaagttatct catctacagc atgtgcacga ccgtggccat 720
73 gttctgtgtc cccttggtgc tgattctggg ctgttacgga ttaattgtga gagctttgat 780
74 ttacaaagat ctggacaact ctctctgag gagaaaatcg atttacctgg taatcattgt 840
75 actgactgtt ttgtctgtgt cttacatccc ttccatgtg atgaaaacga tgaacttgag 900
76 ggcccggtt gattttcaga cccagcaat gtgtgcttcc aatgacaggg tttatgccac 960
77 gtatcaggtg acaagaggtc tagcaagtct caacagttgt gtggaccca ttctctatct 1020
78 cttggcggga gatactttca gaaggagact ctcccagacc acaaggaaag cttctagaag 1080
79 aagtgaggca aatttgcaat ccaagagtga agacatgacc ctcaatattt tacctgagtt 1140
80 caagcagaat ggagatacaa gcctgtgaag gcacaagaat ctccaaacac ctctctgttg 1200
81 taatatggtg ggatgcttaa cagaatcaag tacttttccc ctctttaact ttctagttaa 1260
82 gaaaaaatc aaaccaagaa aatagtgaat taaaaaata atagaagtag aaatgccac 1320
83 atccacactt agcttggttg ggttgcttt cacagtctct ctctctctg actagaagta 1380
84 tgtataataa aacaatacta cctagttaaa aaaaaaaaaa aaaaaa 1426
87 <210> SEQ ID NO: 2
88 <211> LENGTH: 373
89 <212> TYPE: PRT
90 <213> ORGANISM: Homo sapiens
92 <220> FEATURE:
93 <223> OTHER INFORMATION: human purinergic receptor P2Y, G-protein coupled 1
94 (P2RY1)
96 <400> SEQUENCE: 2
97 Met Thr Glu Val Leu Trp Pro Ala Val Pro Asn Gly Thr Asp Ala Ala
98 1 5 10 15
100 Phe Leu Ala Gly Pro Gly Ser Ser Trp Gly Asn Ser Thr Val Ala Ser
101 20 25 30
103 Thr Ala Ala Val Ser Ser Ser Phe Lys Cys Ala Leu Thr Lys Thr Gly
104 35 40 45
106 Phe Gln Phe Tyr Tyr Leu Pro Ala Val Tyr Ile Leu Val Phe Ile Ile
107 50 55 60
109 Gly Phe Leu Gly Asn Ser Val Ala Ile Trp Met Phe Val Phe His Met
110 65 70 75 80
112 Lys Pro Trp Ser Gly Ile Ser Val Tyr Met Phe Asn Leu Ala Leu Ala
113 85 90 95
115 Asp Phe Leu Tyr Val Leu Thr Leu Pro Ala Leu Ile Phe Tyr Tyr Phe
116 100 105 110
118 Asn Lys Thr Asp Trp Ile Phe Gly Asp Ala Met Cys Lys Leu Gln Arg
119 115 120 125
121 Phe Ile Phe His Val Asn Leu Tyr Gly Ser Ile Leu Phe Leu Thr Cys
122 130 135 140
124 Ile Ser Ala His Arg Tyr Ser Gly Val Val Tyr Pro Leu Lys Ser Leu

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/516,803

DATE: 03/29/2006

TIME: 09:35:25

Input Set : A:\-138.APP

Output Set: N:\CRF4\03292006\J516803.raw

```

125 145          150          155          160
127 Gly Arg Leu Lys Lys Lys Asn Ala Ile Cys Ile Ser Val Leu Val Trp
128          165          170          175
130 Leu Ile Val Val Val Ala Ile Ser Pro Ile Leu Phe Tyr Ser Gly Thr
131          180          185          190
133 Gly Val Arg Lys Asn Lys Thr Ile Thr Cys Tyr Asp Thr Thr Ser Asp
134          195          200          205
136 Glu Tyr Leu Arg Ser Tyr Phe Ile Tyr Ser Met Cys Thr Thr Val Ala
137          210          215          220
139 Met Phe Cys Val Pro Leu Val Leu Ile Leu Gly Cys Tyr Gly Leu Ile
140 225          230          235          240
142 Val Arg Ala Leu Ile Tyr Lys Asp Leu Asp Asn Ser Pro Leu Arg Arg
143          245          250          255
145 Lys Ser Ile Tyr Leu Val Ile Ile Val Leu Thr Val Phe Ala Val Ser
146          260          265          270
148 Tyr Ile Pro Phe His Val Met Lys Thr Met Asn Leu Arg Ala Arg Leu
149          275          280          285
151 Asp Phe Gln Thr Pro Ala Met Cys Ala Phe Asn Asp Arg Val Tyr Ala
152          290          295          300
154 Thr Tyr Gln Val Thr Arg Gly Leu Ala Ser Leu Asn Ser Cys Val Asp
155 305          310          315          320
157 Pro Ile Leu Tyr Phe Leu Ala Gly Asp Thr Phe Arg Arg Arg Leu Ser
158          325          330          335
160 Arg Ala Thr Arg Lys Ala Ser Arg Arg Ser Glu Ala Asn Leu Gln Ser
161          340          345          350
163 Lys Ser Glu Asp Met Thr Leu Asn Ile Leu Pro Glu Phe Lys Gln Asn
164          355          360          365
166 Gly Asp Thr Ser Leu
167          370
170 <210> SEQ ID NO: 3
171 <211> LENGTH: 1293
172 <212> TYPE: DNA
173 <213> ORGANISM: Mus musculus
175 <220> FEATURE:
176 <223> OTHER INFORMATION: mouse purinergic receptor P2Y, G-protein coupled
1
177          (P2RY1) cDNA
179 <220> FEATURE:
180 <221> NAME/KEY: CDS
181 <222> LOCATION: (32)..(1153)
182 <223> OTHER INFORMATION: P2RY1
184 <400> SEQUENCE: 3
185 tctagtagct gcctgagttg gaaagaagag gatgaccgag gtgccttggt cggttgtccc 60
186 caacgggacg gatgctgcct ttctggcggg cctgggctcg ctttggggaa acagtactgt 120
187 cgcctcaact gcagcagttt cctcttcatt ccaatgtgcc ctgaccaaga ccggtttcca 180
188 gttctactac ctgccggctg tctacatttt agtggttcac ataggcttcc taggcaacag 240
189 cgtggctatc tggatgttcg ttttccacat gaagccttgg agcggcatct ccgtgtacat 300
190 gttcaatttg gctctggctg actttttgta tgtgctcacc ctaccagccc tcatcttcta 360
191 ctacttcaac aagactgact ggatcttcgg ggatgctatg tgcaagctgc agagattcat 420
192 cttccacgta aatctctatg gtagcatctt gttctcacc tgcatcagcg cacacaggtta 480

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/516,803

DATE: 03/29/2006

TIME: 09:35:25

Input Set : A:\-138.APP

Output Set: N:\CRF4\03292006\J516803.raw

```

193 cagtggcggtg gtgtaccctc tcaagtctct gggcaggctc aagaagaaga atgccattta 540
194 tgtcagcggtg ctggtgtggc tcatgtgtgt ggtggccatc tcccctattc tcttctactc 600
195 tggcactggg actcggaaaa acaaaactgt cacctgctat gacaccacgt ccaatgatta 660
196 cctgcgaagt tatttcatct acagtatgtg cactgactgt gccatgttct gcaccccttt 720
197 ggtgctgctg ttgggtgtgt atggattaat tgttaaagct ttgatttaca atgacctgga 780
198 caactctccg ctccggagga aatccattta cctggtgata attgtcctga cgggtgtttgc 840
199 tgtgtcttat atccctttcc atgtgatgaa aacgatgaat ttgcgagcac ggttggtatt 900
200 ccagacccca gaaatgtgtg atttcaacga cagggtttat gccacttatc aggtacaag 960
201 aggtctagca agtctcaaca gctgtgtgga cccattctt tatttcttgg ctggagatac 1020
202 attcagaagg agactgtccc gagccaccag gaaagcttcc aggaggagtg aggccaattt 1080
203 acaatccaag agtgaagaaa tgactctcaa tttttgtct gagttcaagc agaatggaga 1140
204 cagcagtttg tgaaggcacg agatcctagc tcctgagttt tgtaacatgg tcacaagaca 1200
205 tccctgagat gatctatgca tacacaggtc aagaagaagc aacactctat tgaccaaag 1260
206 accagtgtgt gccacctgag tgagggtttt cct 1293

```

209 <210> SEQ ID NO: 4

210 <211> LENGTH: 373

211 <212> TYPE: PRT

212 <213> ORGANISM: Mus musculus

214 <220> FEATURE:

215 <223> OTHER INFORMATION: mouse purinergic receptor P2Y, G-protein coupled

216 (P2RY1)

218 <400> SEQUENCE: 4

```

219 Met Thr Glu Val Pro Trp Ser Val Val Pro Asn Gly Thr Asp Ala Ala
220 1 5 10 15
222 Phe Leu Ala Gly Leu Gly Ser Leu Trp Gly Asn Ser Thr Val Ala Ser
223 20 25 30
225 Thr Ala Ala Val Ser Ser Ser Phe Gln Cys Ala Leu Thr Lys Thr Gly
226 35 40 45
228 Phe Gln Phe Tyr Tyr Leu Pro Ala Val Tyr Ile Leu Val Phe Ile Ile
229 50 55 60
231 Gly Phe Leu Gly Asn Ser Val Ala Ile Trp Met Phe Val Phe His Met
232 65 70 75 80
234 Lys Pro Trp Ser Gly Ile Ser Val Tyr Met Phe Asn Leu Ala Leu Ala
235 85 90 95
237 Asp Phe Leu Tyr Val Leu Thr Leu Pro Ala Leu Ile Phe Tyr Tyr Phe
238 100 105 110
240 Asn Lys Thr Asp Trp Ile Phe Gly Asp Ala Met Cys Lys Leu Gln Arg
241 115 120 125
243 Phe Ile Phe His Val Asn Leu Tyr Gly Ser Ile Leu Phe Leu Thr Cys
244 130 135 140
246 Ile Ser Ala His Arg Tyr Ser Gly Val Val Tyr Pro Leu Lys Ser Leu
247 145 150 155 160
249 Gly Arg Leu Lys Lys Lys Asn Ala Ile Tyr Val Ser Val Leu Val Trp
250 165 170 175
252 Leu Ile Val Val Val Ala Ile Ser Pro Ile Leu Phe Tyr Ser Gly Thr
253 180 185 190
255 Gly Thr Arg Lys Asn Lys Thr Val Thr Cys Tyr Asp Thr Ser Asn
256 195 200 205
258 Asp Tyr Leu Arg Ser Tyr Phe Ile Tyr Ser Met Cys Thr Thr Val Ala

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/516,803

DATE: 03/29/2006

TIME: 09:35:25

Input Set : A:\-138.APP

Output Set: N:\CRF4\03292006\J516803.raw

```

259      210      215      220
261 Met Phe Cys Ile Pro Leu Val Leu Ile Leu Gly Cys Tyr Gly Leu Ile
262 225      230      235      240
264 Val Lys Ala Leu Ile Tyr Asn Asp Leu Asp Asn Ser Pro Leu Arg Arg
265      245      250      255
267 Lys Ser Ile Tyr Leu Val Ile Ile Val Leu Thr Val Phe Ala Val Ser
268      260      265      270
270 Tyr Ile Pro Phe His Val Met Lys Thr Met Asn Leu Arg Ala Arg Leu
271      275      280      285
273 Asp Phe Gln Thr Pro Glu Met Cys Asp Phe Asn Asp Arg Val Tyr Ala
274      290      295      300
276 Thr Tyr Gln Val Thr Arg Gly Leu Ala Ser Leu Asn Ser Cys Val Asp
277 305      310      315      320
279 Pro Ile Leu Tyr Phe Leu Ala Gly Asp Thr Phe Arg Arg Arg Leu Ser
280      325      330      335
282 Arg Ala Thr Arg Lys Ala Ser Arg Arg Ser Glu Ala Asn Leu Gln Ser
283      340      345      350
285 Lys Ser Glu Glu Met Thr Leu Asn Ile Leu Ser Glu Phe Lys Gln Asn
286      355      360      365
288 Gly Asp Thr Ser Leu
289      370
292 <210> SEQ ID NO: 5
293 <211> LENGTH: 3204
294 <212> TYPE: DNA
295 <213> ORGANISM: Rattus norvegicus
297 <220> FEATURE:
298 <223> OTHER INFORMATION: rat purinergic receptor P2Y, G-protein coupled 1
299 (P2RY1) cDNA
301 <220> FEATURE:
302 <221> NAME/KEY: CDS
303 <222> LOCATION: (620)..(1741)
304 <223> OTHER INFORMATION: P2RY1
306 <400> SEQUENCE: 5
307 gaattcgccg cgcctgact tcatggactg cgagcggggg gaagggtagc tccaggggtcc 60
308 gcggccaaga gctctcccaa ggctgagtg cggctgagaa tgcggccgga agaagagtcg 120
309 cggcgcccc ggtgacggtc cggagttgca aggtagggag taggcagatg gccaggcaaa 180
310 gttgatcgga gcgaggaggt gggtggcctg cgccttcggc cgctgagAAC cgcggagcta 240
311 cttggacttg accctactcg cccagcgcct ttgagcagcg cctatctgtc gccctggcgg 300
312 gagcgcactt gcaaacttgg tggaggtgcc ctgcgcgtcc tgttgtgtaa cctccgtgcc 360
313 gccagctgga ccgggaagtt gcccgcgcgt ccttcagctt ggatcggtcg cagccccggg 420
314 cgaatttcat ggccccgcga caaacgcgcg gccagagccg gtgtgggcga gccccgcgc 480
315 gtcocgaccc gtagggaact cccgcacgcg gtccctgccc ctggcccgcg cctccgatgc 540
316 gcgctgagcc tctcgccagc agctgccctc tcgtcgcggt ctgtcctttc gagtagctgc 600
317 ctgagttgga aagaagagga tgaccgaggt gccttggtcg gctgtcccca acgggacaga 660
318 tgctgccttc ctggttggtc tgggtccct ttggggaaac agtacaatcg cctcgactgc 720
319 agcagtttcc tcttcattcc gatgtgccct gatcaagacc ggcttccagt tctactacct 780
320 gcctgcggtc tacatcttag tgttcatcat aggttccctt ggcaacagcg tggcaatctg 840
321 gatgtttgtt ttccacatga agccttggag cggcatctcg gtgtacatgt tcaatttggc 900
322 tctggccgac tttttgtatg tgctcaccct accagctctc atcttctact acttcaacaa 960

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/516,803

DATE: 03/29/2006
TIME: 09:35:26

Input Set : A:\-138.APP
Output Set: N:\CRF4\03292006\J516803.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:13; N Pos. 3515

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/516,803

DATE: 03/29/2006

TIME: 09:35:26

Input Set : A:\-138.APP

Output Set: N:\CRF4\03292006\J516803.raw

L:1041 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:3480